The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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AND INTERFERENCES

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ARTHUR P. FRAAS,
RICHARD L. FURGERSON, and
HAROLD L. FALKENBERRY

Appeal No. 1999-2120
Application No. 08/835,419

ON BRIEF

Before GARRIS, WARREN, and TIMM, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-20, 22 and 23.

On page 3 of the Answer, the examiner has withdrawn the rejections of claims 5, 10, 15 and 20. As a consequence, we dismiss the appeal as to these last mentioned claims, thereby leaving for our consideration on this appeal only claims 1-4, 6-9, 11-14, 16-19,

22 and 23. The only other claim in the application, which is claim 21, stands objected to by the examiner but is otherwise allowable.

The subject matter on appeal relates to an apparatus and to a process for pretreating coal before subjecting the coal to pyrolysis. This pretreatment involves preheating the coal to a temperature below the coal pyrolysis temperature and removing oxygen from the coal prior to pyrolysis. Further details of this appealed subject matter are set forth in representative independent apparatus claim 1 and independent process claim 23 which read as follows:

1. A coal pyrolysis pretreatment apparatus comprising a pretreatment vessel for holding a bed of coal particles, a preheater for heating the bed of coal particles to a temperature below the coal pyrolysis temperature range, an enclosure around the vessel for preventing air from contacting the bed of coal particles, and oxygen remover for removing the oxygen released from the heated coal particles and transporting it away from the enclosure so that the partial pressure of oxygen in the pretreatment region is kept low.

23. The process of coal pyrolysis pretreatment comprising contacting coal particles in a bed with an oxygen removal gas, removing the oxygen removal gas with oxygen removed from the coal particles, and transferring the pretreated coal to a pyrolysis retort in the absence of air.

The reference set forth below is relied upon by the examiner in the rejections before us:

Selep et al. (Selep)	4,397,657	Aug. 9, 1983

Claims 1-4, 6, 7, 9, 11-14, 16-19, 22 and 23 are rejected under 35 U.S.C. § 102(b) as being anticipated by or alternatively under 35 U.S.C. § 103 as being obvious over Selep.

Claim 8 is rejected under 35 U.S.C. § 103 as being obvious over Selep.

On page 8 of the Brief, the appellants have stated that "[t]he claims do not stand or fall together." Accordingly, in our assessment of the above noted rejections, we have separately considered those individual claims for which a specific argument has been presented on this appeal.[1]

Opinion

For the reasons which follow and those set forth in the Answer, we will sustain the examiner's § 102 and § 103 rejections of claims 1-4, 6, 9, 11-14, 16, 19, 22 and 23 over the Selep reference. However, we cannot sustain the examiner's corresponding rejections of claims 7, 8, 17 and 18 as fully explained below.

As correctly indicated by the examiner, Selep discloses an apparatus and a process for charging or feeding coal particles into a pressurized gasification reactor in such a way as to prevent air in the ambient atmosphere from flowing into the apparatus

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[1] For clarification purposes, we point out that the appellants' comments regarding certain of the appealed claims amount to nothing more than a reiteration of claim limitations (e.g., see the comments on page 11 of the Brief regarding dependent claims 14 and 16) without specifying any error in the examiner's rejection of these claims. These comments cannot be regarded as arguments within the meaning of 37 CFR § 1.192(c)(8)(1998).

and to prevent gases in the reactor from flowing into the feed apparatus, thereby avoiding the development of a combustible mixture of gases within the apparatus. These objectives are achieved via a feed apparatus which includes first and second rotary gas locks and means for injecting nitrogen, steam and a buffer gas (e.g., clean product gas from the gasification reactor) into the apparatus. We share the examiner's determination that the injection of steam (or clean product gas from the gasification reactor) in Selep's apparatus and process would necessarily preheat the coal particles and (along with the injected nitrogen) would remove oxygen released from the heated coal particles thereby transporting it away (i.e., via conduit 51 of patentee's apparatus) as required by the independent apparatus and the process claims on appeal.

The appellants argue Selep contains no teaching or suggestion of preheating coal or removing oxygen therefrom. Nevertheless, it is reasonable to conclude that patentee's apparatus and process would necessarily and inherently achieve these functions since patentee's apparatus elements and process steps correspond to those recited in the appealed independent claims. Indeed, the appellants do not explain and we do not independently perceive how Selep's injection of steam, for example, could not necessarily and inherently preheat the coal particles and concomitantly remove oxygen therefrom. Thus, regardless of whether the rejection is considered under § 102 or § 103, it is fair to conclude that Selep's apparatus and process would perform the functions in question, and it is fair that the appellants should be required to prove

otherwise which they have not done on this appeal. See In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-434 (CCPA 1977).

In essence, therefore, we sustain the examiner's § 102 and § 103 rejections of the independent claims on appeal based upon our determination that the structural elements, process steps and functions recited in these claims are disclosed, either expressly or under the principles of inherency, by the Selep reference. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984). Concerning specifically the § 103 rejection of these claims, it is appropriate to sustain this rejection on the grounds that a lack of novelty is the ultimate or epitome of obviousness. In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982).

For the reasons expressed in the Answer and analogous to those set forth above, we also sustain the examiner's § 102 and § 103 rejections of dependent claims 2-4, 6, 9, 12-14, 16 and 19. With respect to dependent claims 9 and 19 particularly, the examiner has responded to the appellants' argument that Selep contains no teaching or suggestion of the carbon monoxide feature of these claims by pointing out that "carbon monoxide is a common 'product gas' of coal pyrolysis such as taught by Selep" (Answer, page 6). The examiner's finding that the product gas from patentee's gasification reactor (which the examiner regards as corresponding to the appellants' claimed "sweep gas") would contain carbon monoxide is supported by the definition of

"gasification" found in Hawley's Condensed Chemical Dictionary, 11th ed., pages 553-554 (copy attached). Moreover, this finding has not been contested by the appellants with any reasonable specificity. As a consequence, we accept the examiner's finding as correct and sustain his rejection of claims 9 and 19 based on this uncontested finding.

To summarize the foregoing, we have sustained the examiner's § 102 and § 103 rejections of claims 1-4, 6, 9, 11-14, 16, 19, 22 and 23 based on the Selep reference. However, we cannot sustain the corresponding rejections of claims 7, 8, 17 and 18. Although Selep teaches injecting nitrogen, steam and clean product gas into his feed apparatus as discussed above, patentee clearly does not teach and would not have suggested injecting flue gas as required by claims 7 and 17 or partially combusted non-condensable gases as required by claims 8 and 18.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

BRADLEY R. GARRIS)
Administrative Patent Judge)
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) BOARD OF PATENT
CHARLES F. WARREN) PATENT
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) INTERFERENCES
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)
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